ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.B.F./

Doc code: IDS Doc description: Information Disclosure Statement (IDS) Filed PTO/SB/08a (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

NFORMATION DISCLOSURE TATEMENT BY APPLICANT Not for submission under 37 CFR 1.99)	Application Number		10550323	
	Filing Date		2005-09-23	
	First Named Inventor	Rogei	r D. Chamberlain	
	Art Unit		2484 2162	
(Not for Submission under or of it 1.00)	Examiner Name	-	ng. Watthew I JBF	
	Attorney Docket Numb	er	53047-57370	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.B.F./

				U.S.I	PATENTS	Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5347634		1994-09-13	Herrell et al.	
	2	5421028		1995-05-30	Swanson	
	3	5440723		1995-08-08	Arnold et al.	
	4	5740244		1998-04-14	Indeck, et al.	
	5	5978801		1999-11-02	Yuasa	
	6	5995963		1999-11-30	Nanba et al.	
	7	6175874		2001-01-16	lmai et al.	
	8	6381242	B1	2002-04-30	Maher, III et al.	

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Roge	r D. Chamberlain
Art Unit		-243T 2162
Examiner Name	- Wenni	ing-Matthew JBF
Attorney Docket Number		53047-57370

9	6389532		2002-05-14	Gupta et al.	
10	6535868		2003-03-18	Galeazzi et al.	
11	6564263	B1	2003-05-13	Bergman et al.	
12	6704816		2004-03-09	Burke	
13	6785677		2004-08-31	Fritchman	
14	6850906		2005-02-01	Chadha et al.	
15	6931408		2005-08-16	Adams et al.	
16	6980976		2005-12-27	Alpha et al.	
17	7019674		2006-03-28	Cadambi et al.	
18	7181608	B2	2007-02-20	Fallon et al.	
19	7222114		2007-05-22	Chan et al.	
 	ALL DEEEDENICES	CONSI	DEBED EVA	PT WHERE LINED THROUGH	/IDE/

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Rogei	er D. Chamberlain
Art Unit		2431- 2162
Examiner Name	- l-lenni	ning, Matthew T. JBF
Attorney Docket Number		53047-57370

	20	7224185	B2	2007-05-29	Campbell et al.		
	21	7225188	B1	2007-05-29	Gai et al.		
	22	7287037		2007-10-23	An et al.		
If you wis	h to ac	dd additional U.S. Paten	t citatio	n information pl	ease click the Add button.		Add
			U.S.P	ATENT APPLIC	CATION PUBLICATIONS		Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Releva	Columns,Lines where nt Passages or Relevant s Appear
	1	20010052038		2001-12-13	Fallon et al.		
	2	20020031125		2002-03-14	Sato		
	3	20020069370		2002-06-06	Mack		
	4	20020138376	A1	2002-09-26	Hinkle		
	5	20030018630		2003-01-23	Indeck et al.		
	6	20040015633		2004-01-22	Smith		

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Rogei	r D. Chamberlain
Art Unit		- 2484 2162
Examiner Name	Hermi	ing, Matthew T. JBF
Attorney Docket Number		53047-57370

7	20040054924		2004-03-18	Chuah et al.	
8	20040162826		2004-08-19	Wyschogrod et al.	
9	20040196905		2004-10-07	Yamane et al.	
10	20050005145	A1	2005-01-06	Teixeira	
11	20050175010		2005-08-11	Wilson et al.	
12	20050175175	A1	2005-08-11	Leech	
13	20050187974	A1	2005-08-25	Gong	
14	20060031263	A1	2006-02-09	Arrouye et al.	
15	20060036693		2006-02-16	Hulten et al.	
16	20070067108		2007-03-22	Buhler et al.	
17	20070078837		2007-04-05	Indeck et al.	

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Rogei	D. Chamberlain
Art Unit		2162 2434
Examiner Name	-Henni	ng, Matthew T. JBF
Attorney Docket Number		53047-57370

18	20070118500	2007-05-24	Indeck et al.	
19	20070174841	2007-07-26	Chamberlain et al.	
20	20070277036	2007-11-29	Chamberlain et al.	
21	20080086274	2008-04-10	Chamberlain et al.	
22	20080109413	2008-05-08	Indeck et al.	
23	20080114724	2008-05-15	Indeck et al.	
24	20080114725	2008-05-15	Indeck et al.	
25	20080114760	2008-05-15	Indeck et al.	
26	20080126320	2008-05-29	Indeck et al.	
27	20080133453	2008-06-05	Indeck et al.	
28	20080133519	2008-06-05	Indeck et al.	

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Roge	r D. Chamberlain
Art Unit		243 4 2162
Examiner Name		ing, Matthew T. JBF
Attorney Docket Number		53047-57370

If you wis	h to a	dd additional U.S. Pub				olease click the Add butto		
			FORE	IGN PAT	ENT DOCUM	IENTS	Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	Т5
	1	10-313341	JP		1998-11-24	Nat'l Aerospace Lab et al.		
	2	2000357176	JP		2000-12-26	IBM		
	3	2001014239	JP		2001-01-19	Hitachi Ltd		
	4	2001518724	JP		2001-10-16	Worldtalk Corporation		X
	5	9-269930	JP		1997-10-14	Hitachi Ltd.		
	6	1999055052	wo		1999-10-28	Sun Microsystems, Inc.		
	7	199905814	wo		1999-02-04	Worldtalk Corporation		
	8	2001061913	wo		2001-08-23	Verimatrix, Inc.		
	9	2001080082	wo	A2	2001-10-25	Washington University		

(Not for submission under 37 CFR 1.99)

	Application Number		10550323				
· ·····g = ····			2005-09-23				
			r D. Chamberlain				
	Art Unit		<u>2434</u> 2162				
Examiner Name Herminer Attorney Docket Number		Henni	ng, Matthew T: JBF				
		er	53047-57370				

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.B.F./

		J. There has I. K. Beers K. Beers K. S. Beers B. M. No. J. Beers B. J.			, , , , , , , , , , , , , , , , , , ,	INED HINOOGH. 70.D.I	,	
	10	2002082271	wo		2002-10-17	Audible Magic Corporation		
	11	2003100662	wo		2003-12-04	Washington University		
	12	2004042560	wo		2004-05-21	Lockheed Martin Corporation		
	13	2004042561	wo		2004-05-21	Lockheed Martin Corporation		
	14	2004042562	wo		2004-05-21	Lockheed Martin Corporation		
	15	2004042574	wo		2004-05-21	Lockheed Martin Corporation		
	16	2005026925	wo		2005-03-24	Washington University / Data Search Systems, Inc.		
	17	2005048134	wo	A	2005-05-26	Washington University		
If you wis	h to a	dd additional Foreign P	atent Document	citation	information p	lease click the Add button		
		T	NON-PATE	NT LITE	RATURE DO	CUMENTS	Remove	
Examiner Initials*	Cite No	LIDOOK MADAZINE JOURNAL SERIAL SYMNOSIUM, CATAION ETC) NATE DADES(S) VOIUME-ISSUE NUMBER(S) 1 12 1						
	1	"A Reconfigurable Computing Model for Biological Research Application of Smith-Waterman Analysis to Bacterial Genomes" A White Paper Prepared by Star Bridge Systems, Inc. [retrieved 2006-12-12]. Retrieved from the Internet: <url: all="" http:="" pages.<="" resources="" smith%20="" td="" waterman%20whitepaper.pdf="" whitepapers="" www.starbridgesystems.com=""></url:>						

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Rogei	r D. Chamberlain
Art Unit		2434 2162
Examiner Name		ing Metthew T JBF
Attorney Docket Number		53047-57370

	ALL REPERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. 70.D.P./	
2	"Technology Overview", downloaded from the http://www.datasearchsystems.com/tech.htm on April 19, 2004 • All	Page
3	ALTSCHUL et al., "Basic Local Alignment Search Tool", J. Mol. Biol., Oct. 5, 1990, 215, pp. 403-410	
4	BEHRENS ET AL., "BLASTN Redundancy Filter in Reprogrammable Hardware," Final Project Submission, Fall 2003, Department of Computer Science and Engineering, Washington University	
5	CAVNAR ET AL., "N-Gram-Based Text Categorization", Proceedings of SDAIR-94, 3rd Annual Symposium on Document Analysis and Information Retrieval, Las Vegas, pp. 161-175, 1994	
6	CHAMBERLAIN ET AL., "The Mercury System: Embedding Computation Into Disk Drives", 7th High Performance Embedded Computing Workshop, September 2003, Boston, MA • All Pages.	
7	CHAMBERLAIN ET AL., "The Mercury System: Exploiting Truly Fast Hardware for Data Search", Proc. of Workshop on Storage Network Architecture and Parallel I/Os, September 2003, New Orleans, LA .All Pages.	
8	CHENNA et al., "Multiple Sequence Alignment with the Clustal Series of Programs", Nucleic Acids Research, 2003, Vol. 31, No. 13, pp. 3497-3500	
9	CHO ET AL., "Deep Packet Filter with Dedicated Logic and Read Only Memories", 12th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, April 2004 . All Pages.	
10	CHODOWIEC et al., "Fast Implementations of Secret-Key Block Ciphers Using Mixed Inter- and Cuter-Round Pipelining", Proceedings of International Symposium on FPGAs, pp. 94-102 (February 2001)	
11	CHOLLETI, "Storage Allocation in Bounded Time", MS Thesis, Dept. of Computer Science and Engineering, Washington University, St. Louis, MO (December 2002). Available as Washington University Technical Report WUCSE-2003-2 . All Pages.	
12	CLARK ET AL., "Scalable Pattern Matching for High Speed Networks", Proceedings of the 12th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, 2004; FCCM 2004, 20-23 April 2004; pp. 249-257; IEEE Computer Society; Cambridge, MA USA	
 L	l .	l

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Roge	r D. Chamberlain
Art Unit		2162
Examiner Name Henni Attorney Docket Number		ng, Matthew T. JBF
		53047-57370

	ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.B.F./	
13	COMPTON ET AL., "Reconfigurable Computing: A Survey of Systems and Software", Technical Report, Northwestern University, Dept. of ECE, 1999, presented by Yi-Gang Tai ALL Pages.	
14	DENOYER et al., "HMM-based Passage Models for Document Classification and Ranking", Proceedings of ECIR-01, 23rd European Colloquim Information Retrieval Research, Darmstatd, DE, pp. 126-135, 2001	
15	DHARMAPURIKAR et al., "Deep Packet Inspection Using Parallel Bloom Filters," Symposium on High Performance Interconnects (Hotl), Stanford, California, 2003, pp. 44-51	
16	EDGAR, "MUSCLE: Multiple Sequence Alignment with High Accuracy and High Throughput", Nucleic Acids Research, 2004, Vol. 32, No. 5, pp. 1792-1797	
17	FIPS 197, " Advanced Encryption Standard", National Institute of Standards and Technology (2001)	
18	FIPS Pub. 46-3. Data Encryption Standard (DES). Revised version of 46-2. Reaffirmed Oct. 25, 1999. •All Page	9 \$-
19	FORGY, "RETE: A fast algorithm for the many pattern/many object pattern matching problem", Artificial Intelligence, 19, pp. 17-37, 1982	
20	GUERDOUX-JAMET ET AL., "Systolic Filter for Fast DNA Similarity Search", IEEE, 1995, pp. 145-156	
21	GYANG, "NCBI BLASTN Stage 1 in Reconfigurable Hardware," Technical Report WUCSE-2005-30, August 2004, Department of Computer Science and Engineering, Washington University, St. Louis, MO.All Pages.	
22	HOINVILLE, et al. "Spatial Noise Phenomena of Longitudinal Magnetic Recording Media", IEEE Transactions on Magnetics, Vol. 28, No. 6, November 1992 .All Pages.	
23	HUTCHINGS et al., "Assisting Network Intrusion Detection with Reconfigurable Hardware", FCCM 2002: 10th Annual IEEE Symposium on Field-Programmable Custom Computing Machines, 2002	

(Not for submission under 37 CFR 1.99)

Application Number		10550323
Filing Date		2005-09-23
First Named Inventor	Rogei	r D. Chamberlain
		2162
		ng, Matthew To JBF
		53047-57370

24	International Preliminary Report on Patentability (Chapter II) for PCT/US2004/016021 dated August 21, 2007 .All Pages.	
25	International Preliminary Report on Patentability (Chapter II) for PCT/US2004/016398 dated March 13, 2006 .All Pages.	
26	International Search Report for PCT/US2004/016021 dated August 18, 2005All Pages.	
27	JEANMOUGIN et al., "Multiple Sequence Alignment with Clustal X", TIBS, 1998, Vol. 23, pp. 403-405	
28	JONES et al., "A Probabilistic Model of Information Retrieval: Development and Status", Information Processing and Management, August 1998, 76 pages	
29	JUNG ET AL., " Efficient VLSI for Lempel-Ziv Compression in Wireless Data Communication Networks", IEEE Transactions on VLSI Systems, Sept. 1998, pp. 475-483, Vol. 6, No. 3, Institute of Electrical and Electronics Engineers, Washington, DC, USA	
30	PIRSCH ET AL., "VLSI Architectures for Video Compression-A Survey", Proceedings of the IEEE, Feb. 1995, pp. 220-243, Vol. 83, No. 2, Institute of Electrical and Electronics Engineers, Washington, DC, USA	
31	RAMAKRISHNA ET AL., "Efficient Hardware Hashing Functions for High Performance Computers", IEEE Transactions on Computers, December 1997, Vol. 46, No. 12 • All Pages •	
32	RANGANATHAN ET AL., "High-Speed VLSI Designs for Lempe-Ziv Based Data Compression", IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing, Feb. 1993, pp. 96-106, Vol. 40, No. 2, Institute of Electrical and Electronics Engineers, Washington, DC, USA	
33	RATHA ET AL., "FPGA-based coprocessor for text string extraction", IEEE, Sept. 11-13, 2000, pp. 217-221	
34	ROESCH, "Snort - Lightweight Intrusion Detection for Networks", Proceedings of LISA '99: 13th Systems Administration Conference; Nov. 7-12, 1999; pp. 229-238; USENIX Association, Seattle, WA USA	

(Not for submission under 37 CFR 1.99)

Application Number		10550323		
Filing Date		2005-09-23		
First Named Inventor Roger		r D. Chamberlain		
Art Unit		24 94- 2162		
Examiner Name		ng-Matthew JBF		
Attorney Docket Number		53047-57370		

	35	DY, "A bounded search algorithm for segmented channel routing for FPGA's and associated channel architecture sues", IEEE, Nov. 11, 1993, pp. 1695-1705, Vol. 12							
	36	DURDIS and PNEVMATIKATOS, "Fast, Large-Scale String Match for a 10Gbps FPGA-based Network Intrusion etection System", 13th International Conference on Field Programmable Logic and Applications, 2003 .A11 Pages	\exists						
	37	TEINBACH et al., "A Comparison of Document Clustering Techniques", KDD Workshop on Text Mining, 2000 All Pages.							
If you wis	h to ac	additional non-patent literature document citation information please click the Add button Add							
		EXAMINER SIGNATURE							
Examiner	Signa	e /Jean Bolte Fleurantin/ Date Considered 06/15/2010							
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									
¹ See Kind Codes of USPTO Patent Documents at <u>www.USPTO.GOV</u> or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.									